

Environmental Considerations as Part of the Military Decision-Making Process



By Mr. Albert Vargenko

Environmental considerations are not just about endangered species, cleaning up toxic spills, or simply being in compliance with environmental regulations. Current operations and simulations confirm that environmental considerations include many areas that may be low on the commander's (and staff's) priority list, but still need to be considered as part of the military decision-making process (MDMP) and intelligence preparation of the battlefield (IPB).

Consider the following scenario: US deployed forces are about to conduct a deliberate river crossing operation against a smart, determined, but outnumbered enemy. Multiple crossing sites are planned. One brigade combat team (BCT) will cross the river on a line parallel to an underground petroleum pipeline. Not far away is an underground natural gas pipeline. Both pipelines have exposed standpipes and valves on both sides of the river. The terrain is complex, with a mix of small built-up urban areas and rolling agricultural fields. Another BCT has a forward base established less than a kilometer away from a commercial phosphorus plant. A municipal power plant in the area of operations was destroyed by US forces because the enemy was using it to hide an anti-aircraft battery. It is harvest season and local farmers are trying to get their crops in before the rainy season starts. The US mission is to destroy enemy forces, shore up the fledgling elected government, train its armed forces, and stay on to conduct stability operations along with nation-building missions. Winning the hearts and minds of the local population is an important implied task. Another key implied task is to conduct the mission with minimal US and civilian casualties.

That was the scenario given in the Maneuver Support Center (MANSCEN) Captains Career Course Warfighter III culminating exercise sponsored by the MANSCEN Battle Lab. Military police, engineer,

and chemical officers took part in the exercise. They faced the following environmental issues:

- **Choosing a river crossing site.** A thorough terrain analysis that included identification of the existing infrastructure revealed petroleum and natural gas pipelines. Choosing a river crossing site adjacent to those pipelines would not be a good choice. Environmental considerations should be clearly identified during the MDMP and the IPB. The pipelines could be blown up, either on purpose or by accidental artillery or mortar fires, and could create a significant blast, spill burning petroleum products into the river, illuminate the crossing site, and put the crossing at risk. Destruction of the pipelines would also have a significant adverse impact on the civilian population.
- **Selecting a forward operating base.** In the interests of force health protection, selecting a forward operating base too close to a commercial phosphorus plant would not be a good choice. The fumes from the plant could make Soldiers sick. If the plant were deliberately blown up by the enemy, there could be significant loss of life among military and civilian personnel from toxic fumes carried downwind. The destruction of this plant would also have a significant adverse impact on the farming community.

- **Destroying a power plant.** Although it might aid US forces in combat operations, it is not generally a good idea to destroy a power plant. In the aftermath of its destruction, a lot of time, money, and effort would be required to make it operational again. If destruction of the power plant was not absolutely necessary, it should not be targeted. The negative impacts of destroying the power plant should be weighed before the final decision is made to destroy it. There could be alternatives to reducing the enemy fire coming from the facility that do not require the plant's destruction.
- **Securing agricultural chemicals.** US forces are operating in a farming area. There will be plenty of feed stores with agricultural chemicals that could be easily made into explosive devices by a determined and desperate enemy. It should be an important priority in offensive operations to secure them, both to deny their use by the enemy and to protect them for future use by the agricultural community once combat ends.

- **Avoiding farmlands.** Avoiding crops in the fields, vineyards, and orchards as much as possible is a good idea. Any follow-on stability operations would be simpler if the civilian population still had a means to make a living and stay employed. It could be necessary as part of combat operations to destroy some of the agriculture in the area, but the consequences of that have to be addressed in the aftermath by the local government and US forces.

Other environmental considerations associated with military operations that can impact the operation include: dust suppression; insect infestations and vermin; infectious waste disposal; hazardous waste disposal; and protection and/or preservation of historic, religious, and cultural sites.

For more information on environmental considerations during military operations, visit the US Army Engineer School, Directorate of Environmental Integration Web site at <www.wood.army.mil/dei>.